# DNR PROPERTY OF NATURAL REPORTS

# **Compartment Review Presentation**

**Roscommon Forest Management Unit** 

Compartment 146 Entry Year 2015 Acreage: 1,351

**County Roscommon** 

Management Area: Houghton Lake Wetlands

Revision Date: 07/29/2013

Stand Examiner: Doug Bates

**Legal Description:** 

T21N R04W Sections 11, 12, 14

# **Identified Planning Goals:**

Maintain current cover types, balance stocking for sustained yield and healthy stands for both early and late successional types.

#### Soil and topography:

The southern third of the compartment contains the upland soils. The northern 2/3rd's is lowlands consisting of Rifle Peat. The higher ground soils are Suagetauck and Newton Loamy sands.

#### Ownership Patterns, Development, and Land Use in and Around the Compartment:

Large contigous block of State ownership within the compartment and those surrounding it.

#### **Unique Natural Features:**

No Unique Natural Features known.

#### Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

## **Special Management Designations or Considerations:**

Site of the former Wraco Flooding and its associated earthen dam. This area has had documented sightings of Bald Eagle, Osprey, and Common Loon. Leave Cedar to runs its course naturally. The deer density/browsing pressures have not allowed cedar to regenerate and unless excluded from these areas, cedar will not regenerate. As a long lived species, left unharvested, the cedar will still be in the landscape for years to come.

#### **Watershed and Fisheries Considerations:**

Wolf Creek's headwaters is found here

#### Wildlife Habitat Considerations:

Varied wildlife species from deer, to bear, to grouse and protected raptors. Management of the former Wraco Flooding and its earthen dam works.

#### Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand, gravel, and postglacial alluvium. The glacial drift thickness varies between 600 and 800 feet. Beneath the glacial drift are the Pennsylvanian Grand River and Saginaw Formations. The Saginaw is quarried for clay elsewhere in the State. Most of the good gravel pits are associated with upland sites. There are not any gravel pits nearby and the potential for future ones is limited. The Headquarters Oil Field is located one mile to the southeast. This field has produced over 11.3 million barrels of oil and 4.2 Bcf of gas primarily from the Devonian Richfield Formation. It is in secondary recovery operations currently. None of the State land in the compartment is currently leased.

#### **Vehicle Access:**

Access to the upland stands along the southern 1/3rd is good via dirt county roads. The northern third of the stand is lowlands with no road network.

#### **Survey Needs:**

None needed.

#### **Recreational Facilities and Opportunities:**

The area offers hunting, fishing, hiking, dispersed camping, and snowmobiling.

#### **Fire Protection:**

Mostly deciduous cover type on the uplands which can be accessed by wildland fire equipment. The northern portions of the compartment are wet and cannot be accessed by equipment. Use of existing fuel breaks would be used for fire containment.

## **Additional Compartment Information:**

The following reports from the Inventory are attached:

Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

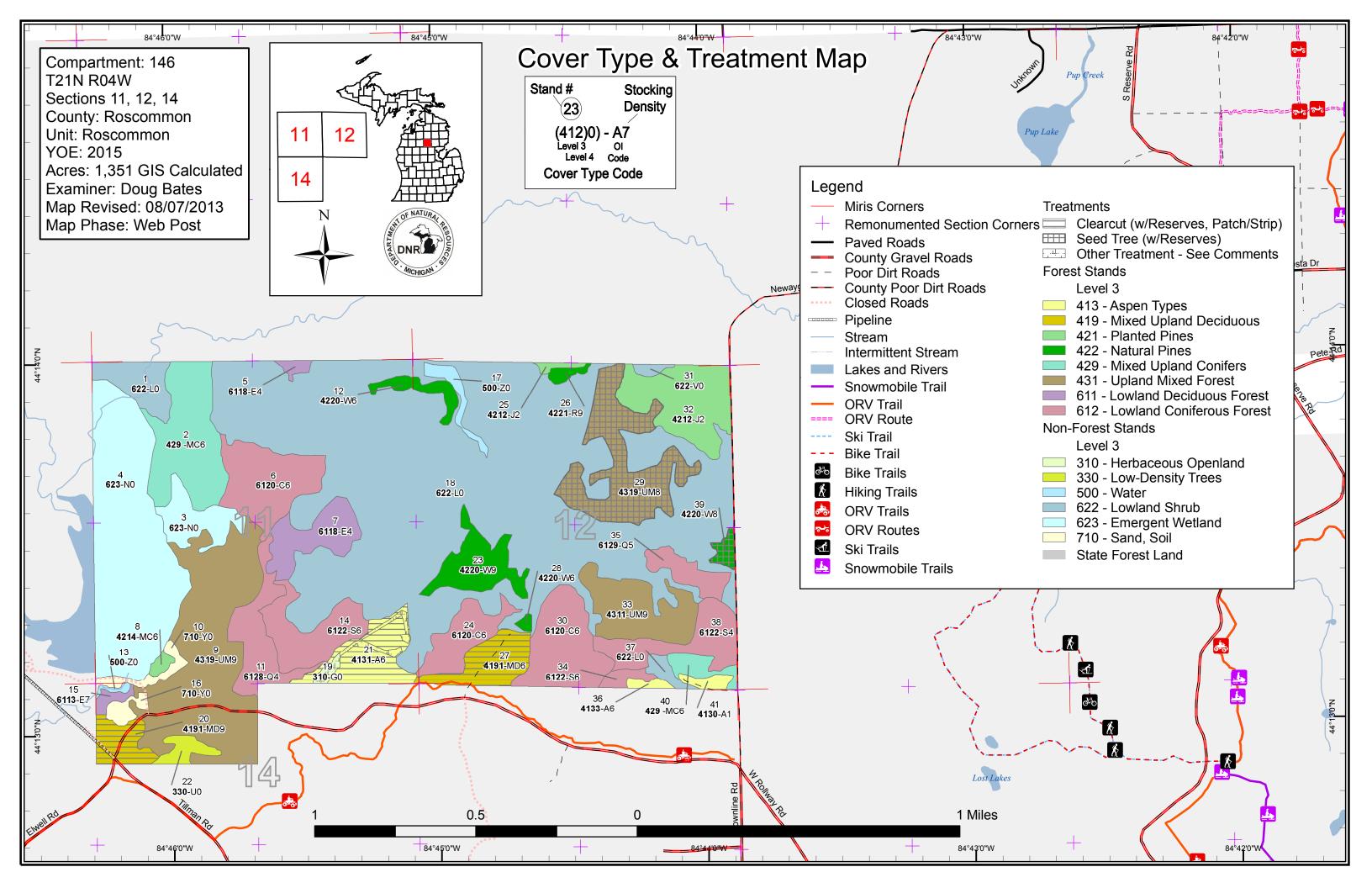
The following information is displayed, where pertinent, on the attached compartment maps:

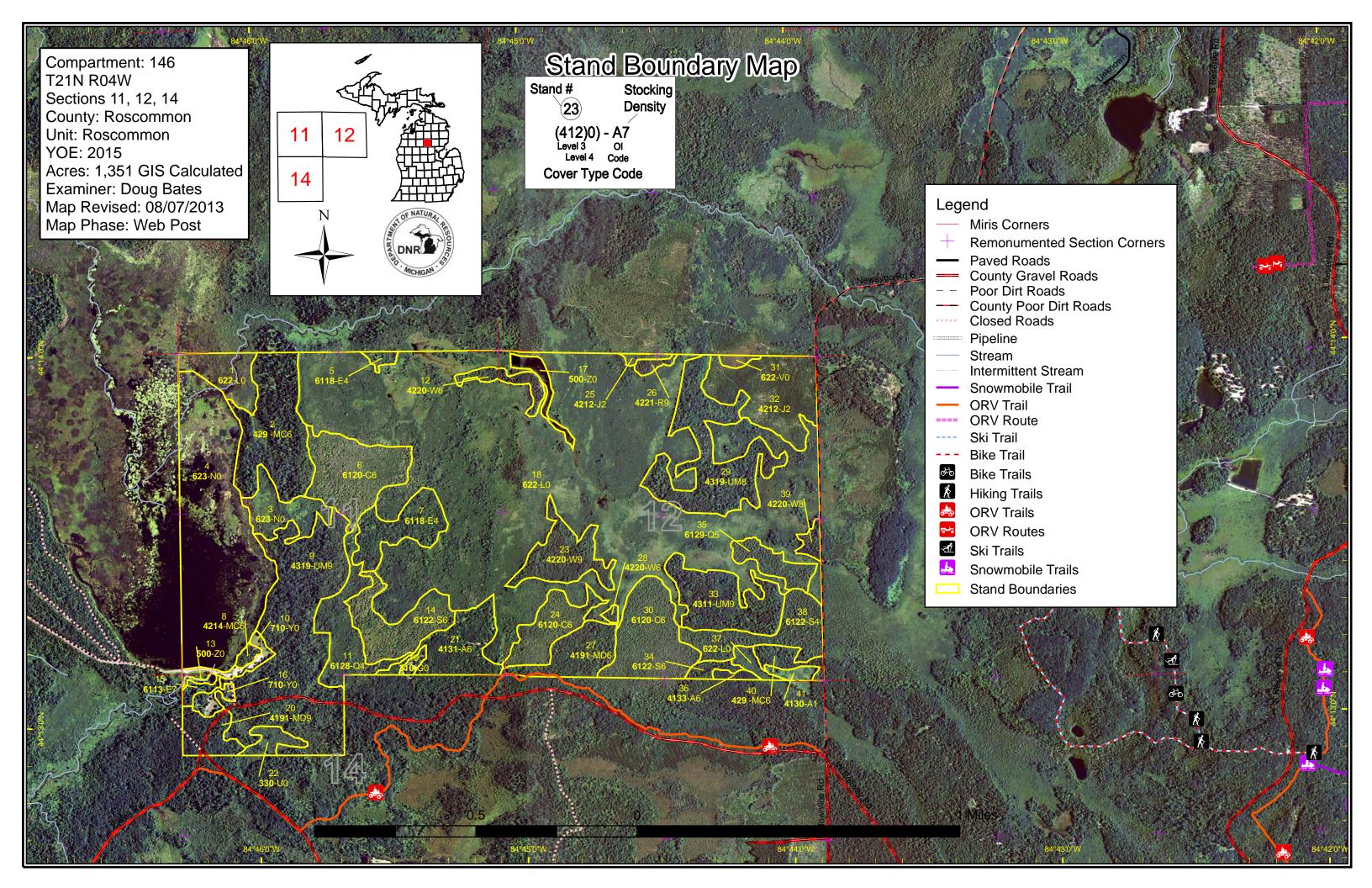
Base feature information, stand boundaries, cover types, and numbers

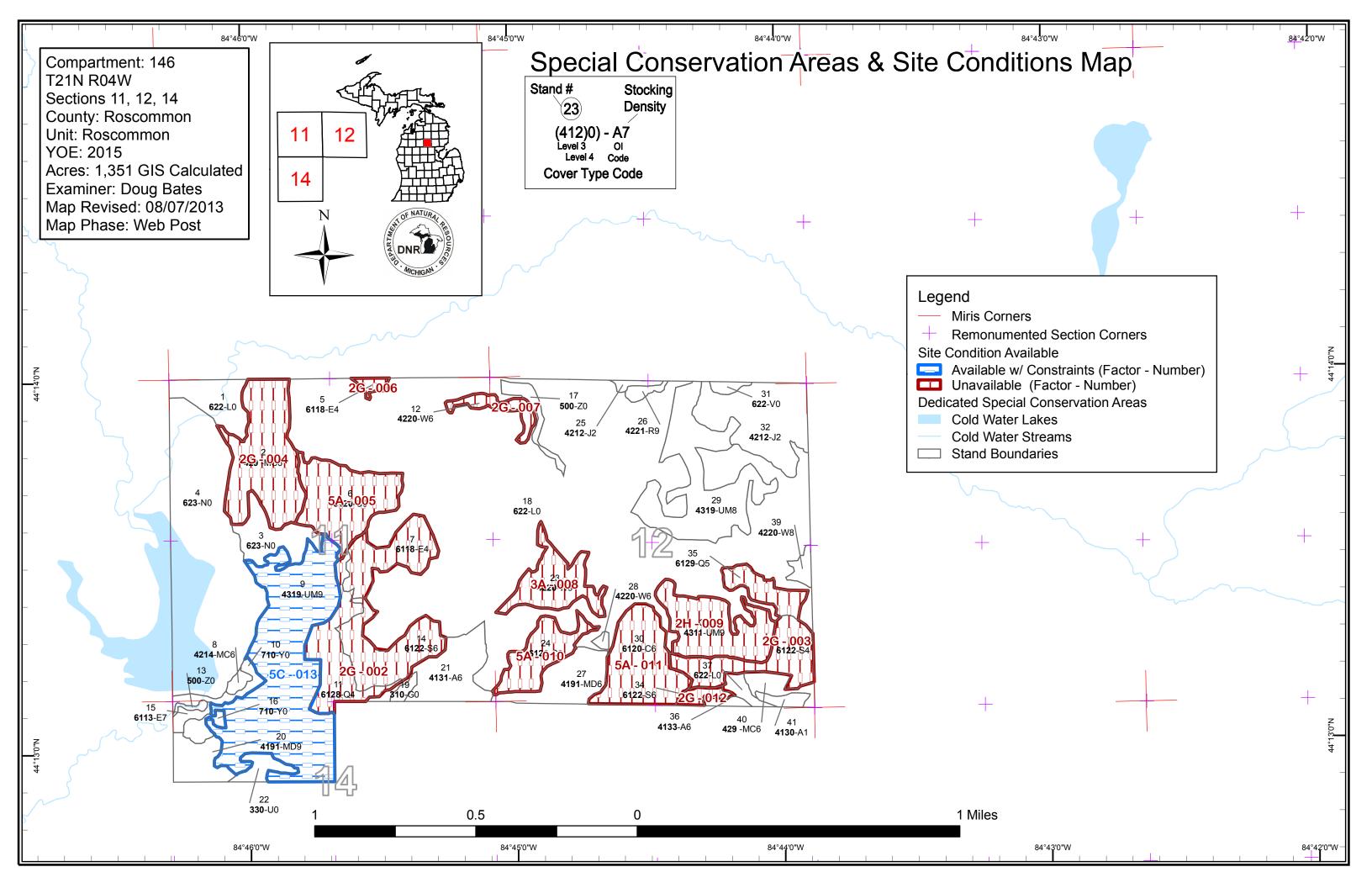
**Proposed treatments** 

Site condition boundaries

Details on the road access system







Compartment 146 Year of Entry 2015

Roscommon Mgt. Unit Douglas Bates : Examiner



#### Age Class

						Age (	Jiass									
		60	70,70	\$2°\$	w w	AD A	18 /	000 /	1010	St. St.	No. No.	a'a',	'a''y	70× /	S / S	, de la companya de l
Aspen	3	0	0	2	27	0	0	0	0	0	0	0	0	0	33	
Bog	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Cedar	0	0	0	0	0	0	0	0	20	38	38	0	0	0	96	
Herbaceous Openland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	ĺ
Jack Pine	0	44	0	0	0	0	0	0	0	0	0	0	0	0	44	
Low-Density Trees	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
Lowland Conifers	0	0	0	0	0	0	0	0	39	0	0	0	0	0	39	ĺ
Lowland Deciduous	0	0	0	0	0	0	0	3	0	26	0	0	0	0	29	
Lowland Shrub	547	0	0	0	0	0	0	0	0	0	0	0	0	0	547	
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	32	27	0	0	0	0	60	
Marsh	140	0	0	0	0	0	0	0	0	0	0	0	0	0	140	
Mixed Upland Deciduous	0	0	0	0	0	0	21	0	0	14	0	0	0	0	35	
Planted Mixed Pines	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	
Red Pine	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	
Sand, Soil	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
Upland Conifers	0	0	0	0	0	0	0	7	0	0	0	0	51	0	58	
Upland Mixed Forest	0	0	0	0	0	0	0	0	54	110	0	0	0	35	199	
Water	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
White Pine	0	0	0	0	0	0	0	0	29	8	0	0	0	0	36	
Total	720	44	0	5	27	0	21	13	174	223	38	0	51	35	1351	
																-



# **Report 2 – Proposed Treatment Summaries**

Roscommon Mgt. Unit Year of Entry 2015

Compartment 146 Total Compartment Acres: 1,351

# **Acres by Treatment Type**

Commercial Harvest - 116 Tree Planting - 0

Other - 6

Habitat Cut - 0

Opening Maintenance - 0

		Cover Type by Harvest Method								
			15 O.	Social of	N. S. S.	Stornood ,	Criminos Osci		Le Constitution de la constituti	
Aspen Types		23	0	0	0	0	0	23		
Mixed Upland Deciduous		35	0	0	0	0	0	35		
Natural Pines		0	0	4	0	0	0	4		
Upland Mixed Forest		0	0	54	0	0	0	54		
	Total	58	0	58	0	0	0	116		

#### Report 3 -- Treatments Prescribed with No Limiting Factor

Comp Year

partment: 146	STOF NATURAL
r of Entry 2015	DNR
	MICHIGAN

а **Treatment** Size BA **Treatment Treatment Cover Type** Acres CoverType Approval n Method Objective d Name Density Age Range Type Status 4191 - Mixed 13.6 High 81-110 Clearcut with 4121 - Oak, Aspen Cmpt. Review 20 71146020-Cut 96 Harvest Upland Deciduous Density Log Reserves Proposal with Conifer

Prescription Treatment: Final harvest removing all species to 2 inch. Mark to leave all super canopy red and white pines along with some wolfy oaks for mast.

Longterm MO: Stand regeneration of aspen/oak mix Specs:

Retention: Leave a retention strip on each side of the pipeline up to 5 percent. The green leave trees will be additional to this.

<u>Other</u> A buried petroleum line runs through the southwest corner of the stand. Place brush along the sides of the yellow gate west of the road to keep Comments: vehicles from driving around gate and down pipeline.

<u>Next</u> Stand will regenerate naturally. No needed treatments.

Steps:

s t

**Proposed** 

Start Date: 10/01/2014

71146021-Cut 23.3 4131 - Aspen, Oak High 45 81-110 Harvest Clearcut with 4131 - Aspen, Oak Cmpt. Review Density Reserves Proposal

Pole

Prescription Treatment: Final harvest with reserves. Cut all species to two inch d.b.h.. Leave approximately 14-16 brush piles for rabbits along the northern

Specs:

Longterm MO: Mix of natural aspen and oak

Retention: Leave a retention strip along stands 11 and 19 on the west side of the stand.

Other Care must be taken to avoid operations within the wildlife opening. One hauling/skidding route is to be used for traversing the opening.

Comments:

Stand 19, the wildlife opening, continued into this stand than previously thought and the map was adjusted thus reducing acreage.

None, good vigourous aspen so should get good aspen regeneration. Should get stump sprouts and growth from acorns. <u>Next</u>

Steps:

**Proposed** 

Start Date: 10/01/2014

71146027-Cut 21.3 4191 - Mixed Hiah 68 81-110 Harvest Clearcut with 4139 - Aspen. Cmpt. Review **Upland Deciduous** Density Reserves Mixed Deciduous Proposal with Conifer Pole

Prescription Treatment: Final harvest all species to a two inch d.b.h.. Mark to leave all supercanopy red and white pines. Also mark to leave a few knarly

oaks for mast. Leave brush piles for rabbits along the outer fringes of the lower ground, approximately 10 piles. Specs: Longterm MO: Natural aspen with a mix of oak, maple, and pine

Retention: Besides leave trees, place a buffer 50 foot buffer along the ORV trail that runs along the south edge. This will be a retention island.

<u>Other</u> ORV Trail will be protected by the retention designation. The forest road into this stands does cross this trail though. There is a cut in

Comments: Compartment 147 but does not touch this stand so no "green-up" issues.

<u>Next</u> None, decent natural regeneration and feel the vigorous aspen will come back after being cut.

Steps:

**Proposed** 

10/01/2014 Start Date:

29 71146029-Cut 54.0 4319 - Mixed Medium 81-110 Harvest Seed Tree with 42211 - Natural Cmpt. Review Red Pine, Mixed **Upland Forest** Density Log Reserves Proposal Deciduous

Prescription Treatment: Remove all species to two inch d.b.h.. Mark to leave 20-40 basal area of the very large red pine for seed source. Cut in dormant Specs:

season to help stimulate aspen and access isssues. Leave a couple dozen rabbit brush piles scattered about the outer stand fringes.

Longterm MO: Natural red pine with mix of aspen and maple.

Retention: Besides the marked red pine, leave a couple of islands up to 5% of stand area.

Access will need to be from compartment 145, stand 29 to the north. A forest road exists except for 500-600 feet needs to be built through an A2 Other\_ Comments:

type. Needs to done during frozen/dormant conditions to stimulate aspen and lessen rutting issues.

None, should get aspen back if cut when dormant and the pine should seed in the ruffed up open soils. <u>Next</u>

Steps:

**Proposed** 

10/01/2014 Start Date:

## Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 146 Year of Entry 2015

t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
39	71146039-Cut	3.7	42200 - Natural White Pine	Medium Density Log	81 J	141-170	Harvest	Seed Tree	42200 - Natural White Pine	Cmpt. Review Proposal

Prescription Treatment: Mark to leave 20 basal area of large red /white pine for seed source. remove all species to two inch d.b.h.. Leave half dozen brush

Specs:

piles along the west side
Longterm MO: Mixed pine with some scattered oak

Retention: None due to stands small size

Other\_ Comments:

s

None, by opening up stand and scarifying stand should get pine to start seeding in. <u>Next</u>

Steps:

**Proposed** 

Start Date: 10/01/2014

NF 71146019-5.6 3102 - Grass Other Unspecified 31021 - Cool Cmpt. Review 19 Proposal Other Season Grass

Prescription Mowed grass opening to be maintained by Wildlife Division

Specs:

Other\_ Adjusted acreage to reflect the opening continuing into Stand 21.

Comments:

<u>Next</u> Steps:

**Proposed** 

Unspecified Start Date:

**Total Treatment** 

**Acreage Proposed:** 121.5

Roscommon Mgt. Unit Report 4 -- Treatments Prescribed with Compartment: 146 a Limiting Factor s Year of Entry 2015 t **Treatment** Acres CoverType Size Stand ВА **Treatment Treatment Cover Type Approval** n Method Objective Status Name Density Age Range Type #Type! **Prescription** Specs: Other Comment: **Next** Steps: Proposed #Type!

Total Treatment Acreage Proposed:

Start Date: # Limiting Factor

d: 0

Doug Bates : Examiner

Compartment 146 Year of Entry 2015

Availa	ability for I	Management							
Total	Acres	Acres	D	omina	nt Site	e Con	dition	s	
Acres	Available	Not Available		No	5C	5A	3A	2H	2G
32	32	0	Aspen	32					0
96	0	96	Cedar	0		96			
44	44		Jack Pine	44					
39	0	39	Lowland Conifers		0				39
29	3	26	Lowland Deciduous	3					26
59	0	59	Lowland Spruce/Fir	0					59
35	35		Mixed Upland Deciduous	35					
2	2		Planted Mixed Pines	2					
3	3		Red Pine	3					
58	7	51	Upland Conifers	7					51
199	164	35	Upland Mixed Forest	54	110			35	
36	5	31	White Pine	5			24		8
633	296	336	Total Forested Acres	186	110	96	24	35	182
	47%	53%	Relative Percent						

<sup>\*</sup>Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

002	Not Available	2G: Too wet (sensitive			
		soils, does not include access issues)	79		
Con	nments:				
003 N	Not Available	2G: Too wet (sensitive soils, does not include access issues)	40		
Con	nments:				

# Report 5 – Site Conditions

Roscommon Mgt. Unit

Doug Bates: Examiner

Compartment 146 Year of Entry 2015

004	Not Available	2G: Too wet (sensitive soils, does not include access issues)	51	5A: Not able to obtain desirable regeneration		
C	comments:					
005	Not Available	5A: Not able to obtain desirable regeneration	38	2G: Too wet (sensitive soils, does not include access issues)	5A: Not able to obtain desirable regeneration	
	comments: mount of deer bro	wse will not allow cedar regene	ration			
006	Not Available	2G: Too wet (sensitive soils, does not include access issues)	3			
	<b>Comments:</b> Surrounded by large	e expanses of low ground maki	ng road	d building impossible.		
007	Not Available	2G: Too wet (sensitive soils, does not include access issues)	8	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)		
	comments: Surrounded by large	e expanse of wet ground makin	g road	building impossible.		
800	Not Available	3A: Potential old growth / biodiversity	24	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)		
	Comments: Supercanopy white	and red pine mixed with other s	species	i.		
009	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	35	3A: Potential old growth / biodiversity		
	Comments: Supercanopy white	and red pine mixed with other s	species	i.		

# **Report 5 – Site Conditions**

Roscommon Mgt. Unit

Doug Bates: Examiner

Compartment 146 Year of Entry 2015

010	Not Available	5A: Not able to obtain desirable regeneration	20	2G: Too wet (sensitive soils, does not include access issues)	3L: Other wildlife concerns	
	comments: Cedar will not reger	nerate due to high deer populati	ions. L	eave to keep cedar in area.		
011	Not Available	5A: Not able to obtain desirable regeneration	37	2G: Too wet (sensitive soils, does not include access issues)	3L: Other wildlife concerns	
	Comments:					
V	Vill lose cedar com	npnent in stand because regene	eration o	of it will not survive high dee	r numbers in area	
	Vill lose cedar com Not Available	2G: Too wet (sensitive soils, does not include access issues)	eration o	of it will not survive high dee	r numbers in area	
012		2G: Too wet (sensitive soils, does not include			r numbers in area	

Compartment: 146 Year of Entry: 2015



# Report 6 - PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS

\* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Compartment: 146
Year of Entry 2015



# Report 7 - DEDICATED CONSERVATION AREA DETAILS

\* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

Conservation	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Archaeological Site	An aquatic or terrestrial area of the State that contains physical resites of cultural and historical significance that may occur upon to bottomlands. They include thousands of Native American settlem and British outposts, nineteenth century logging camps, mines at the Great Lakes, there are shipwrecks and other remains documbe identified by Natural heritage data from the State Historic Presthis compartment will be implemented in such a manner as to mathe sensitive nature of this information, no further detail about local	errestrial areas and Great Lakes nents and burial sites, as well as French and homesteads. Beneath the waters of enting the maritime trade. Such sites may servation Office. Proposed treatments in hintain the integrity of these sites. Due to
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen condition stocked trout populations and those of other coldwater fish specific conditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of the Director's action and designated as trout resources by Fisheries	es to persist from year to year. Suitable y are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen condi- stocked trout populations and those of other coldwater fish specie year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial

S t	Roscommo	n Mgt. Unit		Report 8	– Forested	Stands Compartment: 146 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	429 - Mixed Upland Conifers	High Density Pole	51.0	120	81-110	Heavy balsam fir understory with trace amounts of other species. No tag alder so think it is a drier site, but not by much. Could use a treatment but access for commercial means is not possible.
5	6118 - Lowland Deciduous with Cedar	Low Density Pole	2.5	90		Slightly higher ground growing some trees. Surrounded on all sides by either bogs or floodings making stand inaccessible at this time and for the foreseeable future.
6	6120 - Lowland Cedar	High Density Pole	38.3	105	81-110	Cedar overstory but no new regeneration. Could be harvested but believe the cedar still won't regenerate and lose this component all together, It will still be a part of the stand for future decades.
7	6118 - Lowland Deciduous with Cedar	Low Density Pole	23.4	90		The paper birch is starting to die out. Regeneration is just trace amounts. Red maple holding its own along with the cedar, Regeneration is mainly red maple and no cedar. Understory is mostly tag alder. Access for commercial harvest is not an option and don't believe the cedar will come back anyway. Let it go its course, at least will still be a component for several more years.
8	42140 - Planted Mixed Pine	High Density Pole	2.2	32	51-80	Do to the concentration of the trees, I believe they were planted by hand at one time by a private landowner. No rows to do a thinning, so wait another 10-20 years to let them thin naturally and maybe then could start a treatment. White and red pine are in the center with jack pine on the perimeter. The jack appears to be coming in naturally.
9	4319 - Mixed Upland Forest	High Density Log	110.3	98	141-170	Heavy to red and white pine on the south end, turning to more white pine and red maple as you go north. Most of the regeneration is white pine, Could be cut at this time but instead wait ten more years to instead harvest treatments adjacent with a higher need and this will stagger the age classes in the compartment.
11	6128 - Lowland Coniferous, Mixed Deciduous	Low Density Pole	26.8	85	1-50	Mixed lowland stand. Heavier to red maple in the overstory.
12	42200 - Natural White Pine	High Density Pole	7.6	90	111-140	Variable stand with majority of cover being white pine with its regeneration being most prevalent. Other species found in some of the lower areas. Stand is surrounded by bogs and beaver floodings making commercial access impossible. Leave for diversity.
14	6122 - Black Spruce	High Density Pole	28.4	88	141-170	Mixed cedar and black spruce stand heavier to the spruce. No cedar regeneration, mainly spruce with trace amounts of red maple and white pine. Leave stand to transition on its own. Destroy too much regeneration trying to get cedar out and minute chance it would come back anyway.
15	6113 - Lowland Maple	Low Density Log	3.1	72	51-80	Outwash plain from Wolf Creek.

S t	Roscommor	n Mgt. Unit		Report 8	– Forested	Stands Compartment: 146 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	4191 - Mixed Upland Deciduous with Conifer	High Density Log	13.6	96	81-110	Overmature aspen and oak with mainly white pine understory regeneration. Harvest to try and keep their component otherwise will eventually convert to white pine. Leave the supercanopy red and white pine along with some scattered oak for mast. There is a buried petroleum line along the west side that will need protecting.
21	4131 - Aspen, Oak	High Density Pole	26.8	45	81-110	Mix of large overmature oak with aspen throughout. The aspen is at age could be harvested. Some ok regeneration now but is light, Several open areas of large oaks, nothing else. Appears to be a camping spot at the north end that gets alot of use. Protect these. Get good aspen regeneration with mixed oak and white pine,
23	42200 - Natural White Pine	High Density Log	23.6	80	111-140	Variable aged stand with overmature aspen. Variable species also but only regeneration of significance is white pine. Could be harvested but need to cross about 600 feet of leatherleaf bog to get to it. Its an island in the middle of a bog complex. Reevaluate in ten years. Maybe able to harvest stand 41 and use it as a stepping stone to cut the distance to travel over bog in half.
24	6120 - Lowland Cedar	High Density Pole	20.4	89		Major overstory is cedar, No regeneration of it, with only regeneration being black spruce which is scattered about in overstory. Pocket of white pine and red maple at the northeast end. Ground is leatherleaf, moss and water. Do not cut. Cedar has slim chance if any of coming back and ruin alot of spruce regeneration in the process. Let it convert over time.
25	42120 - Planted Jack Pine	Medium Density	2.0	15		Stand was harvested in 1996 and then seeded to jack pine with the stands to the northern in Compartment 145 in 1998. Higher elevations contain the oak/aspen with lower elevations having leatherleaf ground cover.
26	42210 - Natural Red Pine	High Density Log	2.6	78	111-140	Natural red pine stand on slightly higher elevated ground. Just trace amounts of red pine regeneration in understory, mostly red maple. Past inventory stated leave as old growth, wait on this but definitely do not harvest at this time. Good diversity for where its at and surrounding types. May look at some treatment in the future to enhance old growth characteristics.
27	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	21.3	68	81-110	Aspen is the predominate regeneration and good portion of the overstory coming in. Just into pole size but quite a bit in sapling size also. The oak is overmature and dying. The aspen is good and vigorous now, harvest and will keep the aspen and hopefully in the process stimulate some more oak to regenerate.
28	42200 - Natural White Pine	High Density Pole	1.2	82	111-140	White pine island surrounded by tag alder marsh/bog. Mix of all diameters. Dense regeneration. Nice diversity. Leave for now, re-evaluate in ten years and could be a stepping stone to reach Stand 23 further out in the marsh/bog.
29	4319 - Mixed Upland Forest	Medium Density Log	54.0	85	81-110	Mixed stand with two pockets of natural red pine along the south end. These have a 200 basal area average. Some very large supercanopy red pine mixed in the remaining stand portions. No regeneration underneath except for red maple and oak. The other portions of the stand are sparse with overmature aspen (30b.a.) in the middle with the red maple/black spruce around the perimeter of higher b.a. There are some very large red pine amongst the aspen. Could benefit from a harvest.

S t	Roscommon Mgt. Unit			Report 8 –	Forested	Stands Compartment: 146 Year of Entry: 2015	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
30	6120 - Lowland Cedar	High Density Pole	37.8	95	81-110	Predominately cedar overstory with some black spruce, but the regeneration is dense spruce. Tag mixed in. Ground cover is leatherleaf, moss and water. Don't feel a harvest would be good. It would ruin a large amount of the spruce regen and the chances of cedar coming back are slim to none. Let it convert over time allowing the cedar to be there for at least another 20 years,	
32	42120 - Planted Jack Pine	Medium Density	42.2	15		Lots of leatherleaf ground cover. Stand was cut in 1996 with compartment to the north. It was then seeded to jack pine in 1998. Mostly lower ground but some higher elevations where the oak and trace amounts of aspen are found. Some small bogs intermixed within the stand.	
33	4311 - Pine, Aspen Mix	High Density Log	35.0	Uneven Age	81-110	Nice supercanopy white pine stand on high ground surrounded by lowland complex. The pines are all log or bigger. Heavy white pine regeneration in the understory with two distinct separate pockets broke up by an overmature aspen type. There is little regen. of the aspen, rather white pine. Some XL white pine in with the aspen overstory. Nominate stand as old growth potential with the accessibility to do a commercial harvest as non-existent.	
34	6122 - Black Spruce	High Density Pole	4.0	89		About one chain at the most wide upland strip along the south end and then the rest of the stand tapers down into low ground.  The high ground is log/pole white pine with white pine regeneration. Low ground is supercanopy white pine with heavy black spruce overstory underneath with scattered clumps of red maple. Lots of black spruce regeneration. Let stand manage itself. Ground hard to work in without damaging and destroying lots of regeneration treating it.	
35	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	12.1	80		Varied stand. Some tamarack and spruce saplings, but hardly any in sub-canopy, mostly tag alder. Reed canary grass, wet stand, not advisable to commercial harvest.	
36	4133 - Aspen, Mixed Pine	High Density Pole	2.3	38	51-80	Nice pole size aspen stand. Beaked hazel and some white pine understory, nothing else. Small size stand with no existing road. Best time and means to harvest would be when Stand 46 of Compartment 147 to the south is treated and do at same time.	
38	6122 - Black Spruce	Low Density Pole	27.5	90	1-50	The larger spruce have died ad blown over. Still sawlog size spruce there but majority is in the pole size class. Some sapling in overstory while other traces in understory. No cedar regeneration. Standing water. Overmature but not advisable to cut with soil conditions and chances of cedar coming back is nill to none. Best to have for few more years than none at all.	
39	42200 - Natural White Pine	Medium Density Log	3.7	81	141-170	Brachen ground cover. Jack pine dying out and toppling. Not much understory regeneration. Could harvest leaving 20 basal area of red/white pine and some oak in larger size class.	
40	429 - Mixed Upland Conifers	High Density Pole	7.4	74	81-110	Some supercanopy red and white pine at west end. Ridge runs along the south line, this is where large pine is. North it tapers into lower ground. Still w. pine regeneration but not as much. Tag alder showing p along with more red maple overstory. Very heavy w. pine regeneration. Some vernal ponds at east end, Wait ten years to see if will benefit from a harvest. Still health and will provide age class diversification in area.	

S t	Roscomm		Report 8	- Forested	Stands Compartment: 146 Year of Entry: 2015	DNR DNR	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	MICHIGAN .
41	4130 - Aspen	Low Density Sapling	3.5	5		Cut in the fall of 2007. Lots of open unfilled area Canopy closure is no more than 30 perce	

# Report 9 - Nonforested Stands

Compartment: 146 Year of Entry: 2015



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	6220 - Alder/willow	17.1	No	Unspecified	Tag alder with a mix of leatherleaf ground cover. Bisected by a drainage into Wraco Flooding.
3	6230 - Cattail	18.9	No	Unspecified	Cattail and reed canary grass mix
4	6230 - Cattail	121.4	Yes	Medium (NonForested)	Wraco Flooding. The dam has been removed and water has drained out. Water is only in the pre-existing stream bed. Cattail around perimeter with marsh grass filling in what once was under water. Managed by Wildlife Division.
10	710 - Sand, Soil	6.2	Yes	Medium (NonForested)	Barren sand with pits and mounds of debris from construction of the dike system for the Wraco Flooding.
13	50 - Water	1.2	No	Unspecified	Wolf Creek discharge from Wraco Flooding.
16	710 - Sand, Soil	4.7	Yes	Medium (NonForested)	Barren sand for the most part. East end is a managed parking lot for the Wraco Flooding managed by Wildlife Division.
17	50 - Water	6.0	No	Unspecified	Beaver flooding, couple of different dams in the complex.  Not impacting good timber at this time.
18	6220 - Alder/willow	525.9	No	Unspecified	Lowland complex with a variable cover type predominately tag and leatherleaf though. On higher humps that are scattered about the stand you find sparse balck spruce, jack pinem tamarack, and/or cedar growing.
19	3102 - Grass	2.2	Yes	High (NonForested)	grass site with scattered multi-stemmed oaks and maples.
22	3302 - Low Density Conifer Trees	6.6	No	Unspecified	Was predominately ash but this has all subcome to the bore. High water table with some cedar and fir scattered about but not enough to call it forested. A small bog on the southline.
31	6225 - Bog	2.2	No	Unspecified	Leatherleaf bog
37	6220 - Alder/willow	4.3	N\A	Unspecified	